

What is claimed is:

1. A method for controlling transmit power carrying out
a transmit power control over a downlink common channel
used to simultaneously transmit same data to a plurality
5 of mobile stations concurrently with a transmit power
control over downlink dedicated channels assigned
individually to said plurality of mobile stations,
comprising the steps of:

said plurality of mobile stations each transmitting
10 a first TPC command for the downlink common channel and
a second TPC command for the downlink dedicated channel
to a base station through an uplink dedicated channel;
and

said base station controlling transmit power of the
15 downlink common channel based on said first TPC command
and controlling transmit power of the downlink dedicated
channels based on said second TPC command.

2. The method for controlling transmit power according
20 to claim 1, wherein a transmission interval of said first
TPC command is longer than a transmission interval of
said second TPC command.

3. The method for controlling transmit power according
25 to claim 1, wherein, in one frame, the number of times
said first TPC command is transmitted is smaller than
the number of times said second TPC command is transmitted.

4. The method for controlling transmit power according to claim 1, wherein both said first TPC command and said second TPC command are transmitted in a same time slot.

5 5. The method for controlling transmit power according to claim 1, wherein said base station increases a transmit power of the downlink common channel when at least one of a plurality of first TPC commands transmitted from said plurality of mobile stations is a TPC command
10 instructing an increase of the transmit power and decreases the transmit power of the downlink common channel when all of said plurality of first TPC commands transmitted from said plurality of mobile stations are TPC commands instructing a decrease of the transmit power.

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6. A method for controlling transmit power carrying out a transmit power control over a downlink common channel used to simultaneously transmit same data to a plurality of mobile stations concurrently with a transmit power
20 control over downlink dedicated channels assigned individually to said plurality of mobile stations, comprising the steps of:

said plurality of mobile stations each transmitting a TPC command for the downlink dedicated channels to a
25 base station through an uplink dedicated channel; and

said base station controlling a transmit power of the downlink dedicated channels based on said TPC command and controlling a transmit power of the downlink common

channel at a transmit power equal to a maximum transmit power in a plurality of transmission powers of the downlink dedicated channels after transmit power control or at said maximum transmit power with an addition of an offset.

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7. The method for controlling transmit power according to claim 6, wherein said plurality of mobile stations each transmit an ACK signal or a NACK signal for the downlink common channel to said base station through the uplink dedicated channel or an uplink random access channel, and

said base station decreases said offset when the ACK signal is received a plurality of times consecutively and increases said offset when the NACK signal is received a plurality of times consecutively.

8. A method for controlling transmit power carrying out transmit power control over a downlink common channel used to simultaneously transmit same data to a plurality of mobile stations concurrently with a transmit power control over downlink dedicated channels assigned individually to said plurality of mobile stations, comprising the steps of:

said plurality of mobile stations each transmitting a TPC command for a downlink dedicated channel and a signal indicating an amount of increase of a transmit power of the downlink common channel to a base station through an uplink dedicated channel or an uplink random access

channel; and

said base station controlling a transmit power of the downlink dedicated channels based on said TPC command and increasing a transmit power of the downlink common
5 channel by said amount of increase of the transmit power.

9. A base station apparatus carrying out a transmit power control over a downlink common channel used to simultaneously transmit same data to a plurality of mobile
10 stations concurrently with a transmit power control over downlink dedicated channels assigned individually to said plurality of mobile stations, comprising:

a reception section that receives a first TPC command for the downlink common channel and a second TPC command
15 for the downlink dedicated channel through an uplink dedicated channel;

a first control section that controls a transmit power of the downlink common channel based on said first TPC command; and

20 a second control section that controls a transmit power of the downlink dedicated channel based on said second TPC command.

10. A base station apparatus carrying out a transmit power
25 control over a downlink common channel used to simultaneously transmit the same data to a plurality of mobile stations concurrently with a transmit power control over downlink dedicated channels assigned

individually to said plurality of mobile stations,
comprising:

a reception section that receives a TPC command for
the downlink dedicated channel through an uplink
5 dedicated channel;

a first control section that controls a transmit
power of the downlink dedicated channel based on said
TPC command; and

a second control section that controls a transmit
10 power of the downlink common channel at a transmit power
equal to a maximum transmit power in a plurality of transmit
powers of the downlink dedicated channels after transmit
power control or at said maximum transmit power with an
addition of an offset.

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11. A base station apparatus carrying out a transmit power
control over a downlink common channel used to
simultaneously transmit same data to a plurality of mobile
stations concurrently with a transmit power control over
20 downlink dedicated channels assigned individually to said
plurality of mobile stations, comprising:

a reception section that receives a TPC command for
a downlink dedicated channel and a signal indicating an
amount of increase of a transmit power of a downlink common
25 channel through an uplink dedicated channel;

a first control section that controls a transmit
power of the downlink dedicated channel based on said
TPC command; and

a second control section that increases the transmit power of the downlink common channel by said amount of increase of the transmit power.